#### Lake Chelan Lake Trout Contain DDT

In 2005 the Washington State Department of Ecology completed a water quality study for Lake Chelan and Roses Lake. This study looked at DDT and PCB levels in lake trout (mackinaw) burbot, kokanee, rainbow trout, and black crappie. Results showed high levels of DDT in lake trout. The Washington State Department of Health (DOH) evaluated these results and has issued a fish consumption advisory for lake trout in Lake Chelan.

DOH recommends that the general public - especially women who might become pregnant, who are pregnant, nursing mothers, and young children limit lake trout (mackinaw) to one meal per week.

#### What is DDT?

DDT is banned today, but once was used widely as an insecticide to control insect pests on crops and forest lands, around homes and gardens, and for industrial and commercial purposes. DDT is slow to degrade and can persist in the environment for a long period of time. DDT was banned in 1972 because it posed unacceptable risks to the environment and to human health.



Eat Fish, Be Smart - Check for local fish advisories. Call 1-877-485-7316 or visit www.doh.wa.gov/fish

# Safe Fish Eating Guide

# Ways to Enjoy Lake Chelan Fish While Protecting Your Health



#### Fish To Limit From Lake Chelan

#### Lake Trout (Mackinaw):

The general public, especially women who might become pregnant, who are pregnant, nursing mothers, and young children should limit lake trout to one meal per week due to DDT.

#### Fish With No Limits- Enjoy!

These fish are good choices to eat because they are low in contaminants.

#### Lake Chelan:

Burbot, kokanee, and rainbow trout.

#### Store-bought Fish:

Some good choices are canned light tuna, cod, flounder, salmon, and trout.

## Health Benefits Gained From Eating Fish

Fish is healthy heart and brain food for you and your children.

Fish are an excellent source of omega-3 fatty acids which are not found naturally in our bodies.



They are essential during pregnancy

for the healthy development of your child's brain, retina, and nerve tissue.

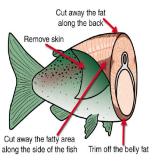
Omega -3 fatty acids help prevent heart disease by reducing blood pressure, inflammation, and blood clotting, which can prevent stroke.

# How To Clean and Cook Fish To Reduce Contaminants

Choose fish low in contaminants and prepare fish properly to reduce your exposure to contaminants, while continuing to gain the health benefits in fish.

By preparing fish the following way, you can reduce your exposure to DDT, PCBs, and other contaminants that collect in the fatty parts of fish by up to 50 %:

- ✓ Remove all the fat.
- ✓ Do not eat the fish skin.
- ✓ Grill, broil or bake the fish.
- ✓ Let the fat drip off during cooking
- ✓ Do not use the fat in gravies or sauces.
- Mercury is stored in the fillet and will not be reduced by preparing this way.



## Who Is Affected By This Advisory?

The general population is affected by this advisory, especially infants and young children who are most sensitive to DDT exposure while their brains are still developing. Women of child-bearing age accumulate DDT in their diet and can pass it on to their unborn children. Children can be exposed by eating foods contaminated with DDT. While breast milk can contain DDT, we still recommend that breastfeeding continue. The benefits of breastfeeding outweigh the risks that are associated with DDT exposure.

#### How Does DDT Affect Health?

The most sensitive health effect associated with DDT exposure is liver damage. Additional health effects that have been associated with acute and chronic DDT exposure include effects to the central nervous system, immune system, and neuro-development. Fish consumption limits protect against the most sensitive health effect (liver damage), which assures that the public is protected against additional health effects.

# How Does DDT Get Into Lake Chelan & Lake Trout?

In Lake Chelan and other surface water, DDT binds to particles in the water and settles into the sediment at the bottom of lakes and rivers. Fish absorb DDT from contaminated sediment floating in the water and from eating other fish. DDT accumulates in the fatty parts of fish.

This document is available in other formats for persons with disabilities. TDD LINE: 1-800-833-6388.

Lake trout image is courtesy of Windsor Nature Discovery 1.800.635.4194 or www.nature-discovery.com

## **Statewide Mercury Advisory**

DOH advises that women of childbearing age and young children should limit the amount they eat of these fish due to high levels of mercury:

#### Largemouth and Smallmouth Bass:

• Washington Lakes and Rivers Statewide -Consume no more than 2 meals per month of largemouth and smallmouth bass.

#### Store Bought Fish:

- Do not eat shark, swordfish, tilefish, king mackerel or tuna steaks.
- Choose light canned tuna, not white. Light canned tuna has 3 times less mercury than canned white (albacore) tuna. Other choices low in mercury are cod, flounder, salmon, and trout.

#### The Health Effects From Exposure to Mercury

Mercury can cause problems with the nervous system that can lead to learning difficulties in children. Other effects include tingling in the hands and feet, lack of coordination, and brain and kidney damage. If you follow these recommendations, you will help keep your exposure to mercury low.

#### Where To Get Answers About:

#### Lake Trout in Lake Chelan

Contact Chelan-Douglas Health District 509-886-6450

## Fish Advisories in Washington State

Contact the Department of Health 877-485-7316 www.doh.wa.gov/fish

#### Lake Chelan Water Quality & TMDL

Contact the Department of Ecology
Dave Schneider 509-454-7894
www.ecy.wa.gov/programs/wq/tmdl

# Lake Chelan Lake Trout: A Guide to Safe Fish Eating





Lake Trout (Mackinaw)

For More Information: Chelan-Douglas Health District 509-886-6450 Washington State Department of Health 877-485-7316



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